Claims (not amended herein):

1. (Previously presented) A method for the presentation of information concerning variations of the arterial filling with blood of organs of living beings on a display unit, the method comprising:

determining perfusion index data for presentation using an algorithm from measured values produced by a non-invasive photometric measuring process for determining the arterial oxygen saturation of the blood;

defining a first perfusion index as a reference value selected from perfusion index values determined during the photometric measuring process;

determining subsequent perfusion indices as relative deviations with respect to the reference value;

displaying the reference value on the display unit; and presenting said relative deviations as information concerning the variations of the perfusion on the display unit.

2. (Previously presented) A method as claimed in claim 1, wherein the defining of the reference value takes place automatically at the beginning of the photometric measuring process.

3. (Canceled)

- 4. (Previously presented) A method as claimed in claim 1, wherein the reference value is stored on a memory chip.
- 5. (Previously presented) A method as claimed in claim 1, wherein the reference value as well as the subsequent perfusion indices are scaled by a factor.
- 6. (Previously presented) A method as claimed in claim 5, wherein the factor is adjustable.

- 7. (Previously presented) A method as claimed in claim 1, wherein the relative deviation of the perfusion is presented in numerical form and the reference value is displayed in numerical form.
- 8. (Previously presented) A method as claimed in claim 1, wherein first and second analog graphic elements are used for the presentation of the reference value and the relative deviations, respectively.
- 9. (Previously presented) A method as claimed in claim 8, wherein first and second parallel bar elements are used as the graphic elements, the first parallel bar element representing the reference value and the second parallel bar element representing the relative deviations.
- 10. (Previously presented) A method as claimed in claim 8, wherein the relative variations of the perfusion are represented by a bar element, and the reference value is represented by positioning of a reference graphic element respective to the bar element.

11. (Canceled)

- 12. (Previously presented) A method as claimed in claim 8, wherein the display is formed as a multidimensional type in conjunction with other physiological variables.
- 13. (Previously presented) A method as claimed in claim 1, wherein an upper alarm limit and a lower alarm limit are provided.
- 14. (Previously presented) A method as claimed in claim 13, wherein the alarm limit is adjustable.
- 15. (Previously presented) A method as claimed in claim 13, wherein an alarm signal is triggered when the alarm limit is exceeded.

16-21. (Cancelled)

22. (Previously presented) A device comprising:

a pulsoximeter for determining arterial O_2 saturation and for providing perfusion data; and

a display unit configured to display:

a first graphical element indicative of a reference perfusion index value derived from the provided perfusion data at a reference time, and

a second graphical element indicative of a subsequent perfusion index value derived from the provided perfusion data at a subsequent time,

wherein the display unit displays the first and second graphical elements together to provide a visual indication of a relative deviation of the subsequent perfusion index value from the reference perfusion index value.

- 23. (Previously presented) A device as claimed in claim 22, wherein the first and second graphical elements are parallel bar elements.
- 24. (Previously presented) A device as claimed in claim 22, wherein the second graphical element is a bar element, and the first graphical element is a graphical position indicator positioned at a point along the bar element to indicate the relative deviation of the subsequent perfusion index value from the reference perfusion index value.
- 25. (Previously presented) A device as claimed in claim 24, wherein the graphical position indicator is selected from a group consisting of an arrow and a line.

26. (Previously presented) A device as claimed in claim 22, wherein the display unit is further configured to display arterial O_2 saturation determined by the pulsoximeter.